

REMARKS

This communication is a full and timely response to the Office Action dated May 4, 2009. Claims 1-22 remain pending. By this communication, claims 1, 4, 8, 12, and 16 are amended. Support for the amended subject matter can be found, for example, in Figure 1 and at page 6, lines 17-21 of the disclosure.

In numbered paragraph 2 on page 2 of the Office Action, claims 1, 5, 6, 13, and 14 are rejected under 35 U.S.C. §102(e) as allegedly being anticipated by *Byers* (U.S. Patent No. 6,693,247). Applicant respectfully traverses this rejection.

As previously discussed, Applicant illustrates an exemplary apparatus actuating a high voltage power breaker. The apparatus includes a first lever 16 that is fixed to a drive shaft 18 of an electrical motor. The first lever 16 is fixed transversely with respect to the drive shaft 18 and acts on a second lever 12 via a connecting rod 14. The second lever 12 is fixed transversely to a rotating shaft 10 of the high voltage power breaker. An actuating lever 42 is fixed transversely to the rotating shaft 10 and actuates a moving contact piece of a switching chamber 40 via an insulating rod 44. The drive shaft 18 rotates about a central axis that is parallel to the central axis about which the rotating shaft 10 rotates.

Independent claim 1 broadly encompasses the foregoing features by reciting:

An apparatus for actuating an electrical switching device high-voltage power breaker having at least one moving contact piece, the at least one moving contact piece being driven via a rotating shaft, wherein an electric motor having a rotating drive shaft, which can be coupled to the rotating shaft for the switching device by means of a gear mechanism, is provided for the purpose of driving the rotating shaft to switch the switching device high-voltage power breaker on and off.

Contrary to the Examiner's position, the configuration of the geneva gear 108, stationary contacts 118, movable insulating panel 122, and insulating panel 114 as

described in the *Byers* patent is not analogous to Applicant's claimed embodiment. The Byers patent discloses that the geneva gear 108 is supported at its center of rotation 109 by a steel shaft 110 that is supported at its ends by support steel plate 112 on one side and an insulating dial switch panel 114 on the other. The geneva gear 108 is firmly attached to a bar 119 that extends perpendicular to the plane of rotation of

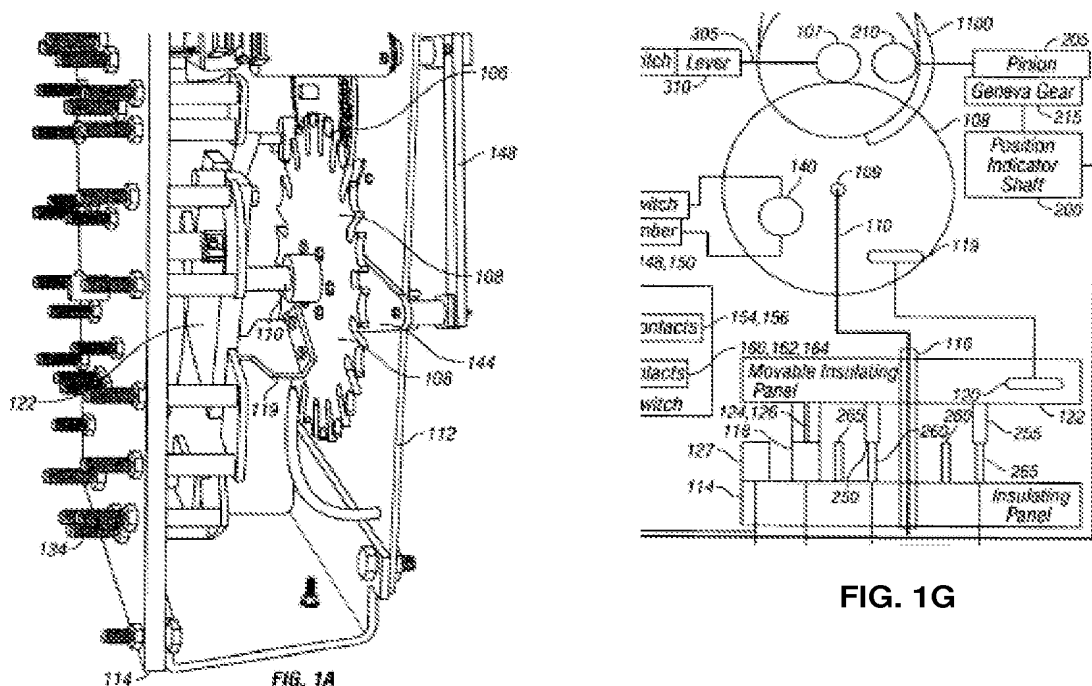


FIG. 1G

the geneva gear 108. The bar 119 engages a drive slot 120 in the rotary arm, which includes a moveable insulating panel 122. The moveable insulating panel 122 is supported by and rotates around the common steel shaft 110 that supports the geneva gear 108. The insulating panel 122 has the drive slot 120 at one end and at the other end supports two electrical moveable contacts 124, 126. Plural stationary contacts 118 are provided on the dial switch insulating panel 114. Each stationary contact 118 has an end 134 that electrically connects to a tap lead of an electronic

control device 136 that receives power from the power source 130 to control an AC value to the load 132. A surface 138 of each stationary contact 118 is engaged by the moveable contacts 124, 126 at a pre-determined sequence. See column 6, line 48 through column 7, line 41.

As can be gleaned by the description and the drawings, the geneva gear rotates about the shaft 110. The moveable insulating panel 122 is mounted to rotate about the central axis of the shaft 110. The bar 119 is connected between the geneva gear 108 and the moveable insulating panel 122. The bar 119 rotates about the axis of the shaft 110 based on the rotation of the geneva gear 108 and drives the moveable insulating panel 122 to also rotate about the central axis of the shaft 110. Based on the above, one of ordinary skill would understand that the shaft 110, the bar 119, and the moveable insulating panel 122 each rotate about the same axis, which is the central axis of the shaft 110.

To properly anticipate a claim, the document must disclose, explicitly or implicitly, each and every feature recited in the claim. See Verdegall Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Because the *Byers* patent discloses that the geneva gear 108, the bar 119, and the moveable insulating panel 122 all rotate about the same axis, i.e., shaft 110, this reference cannot reasonably be interpreted to disclose or suggest the combination of features recited in Applicant's claims. Namely, the *Byers* patent fails to disclose or suggest at least one moving contact piece being driven via a rotating shaft that rotates about a first axis, and an electric motor having a rotating drive shaft that rotates about a second axis, as recited in Applicant's claim 1. For at least this

reason, a *prima facie* case of anticipation has not been established, and withdrawal of this rejection is respectfully requested.

Applicant's claims further stand rejected under 35 U.S.C. §103. Particularly, in numbered paragraph 4 on page 3 of the Office Action, claims 2-6, 11-14, 19 and 20 are rejected for alleged being unpatentability over the *Byers* patent and further in view of *Erickson* (U.S. Patent No. 4,623,859); in numbered paragraph 5 on page 4 of the Office Action, claims 7 and 15 stand rejected as allegedly being unpatentable over the *Erickson* patent; and in numbered paragraph 6 on page 4 of the Office Action, claims 9, 10, 17, 18, 21 and 22 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the *Erickson* patent, and further in view of *Mody* (U.S. Patent No. 6,787,937). Applicant respectfully traverses these rejections.

Regarding claims 4 and 12, the Examiner alleges that the *Erickson* patent remedies the deficiencies of the *Byers* patent. Applicant respectfully submits, however, that there is no reasonable nexus between these two references that would warrant their combination, and even assuming arguendo that these references are combinable as alleged, the resultant device still does not render the claimed embodiment unpatentable.

The *Erickson* patent discloses a circuit breaker that includes a remote control assembly and describes this configuration as follows:

The remote control assembly, indicated generally as numeral 68, comprises a motor 70, coil or gear spring 72, actuator 74 and toggle switch 76. The gear spring 72 is solidly connected with the motor shaft 78 by opening by the gear spring 72 and sliding the motor shaft 78 inside. When the gear spring 72 is released, it creates a torsional pressure fit with the motor shaft 78 so that the gear spring rotates simultaneously with the motor. The second end of the gear spring 72 rotates freely within a support 80.

As the actuator 74 rotates about a pivot 84, a position indicator 86 is operated, as will be described later. An operating rod 88, having two bent ends, transfers the movement of the actuator 74 to the carrier 18. The operating rod 88 rests between two raised nubs 90 on the actuator 74, with the first bent end 92 fitting around one of the nubs 90. The second bent end 94 of the operating rod 88

fits within a hole 96 in the carrier 18. The length of the operating rod 88 allows some space between the first end 92 and the nub 90 to accommodate any movement of the carrier towards the stationary contact 14 due to erosion of the contacts.

* * *

The movement of the actuator 74 towards the motor causes the operating rod 88 to move the carrier 18 away from the stationary contact 14 to a partial open position. The carrier 18 is moved a distance less than that required to move the spring 30 past the equilibrium position, which would snap the operating handle 20a and carrier 18 to the fully open position. Once the contacts are in the fully open position, the circuit breaker cannot be closed from a remote location. Erickson col. 3, line 61 through col. 4, line 14, col. 4, lines 26-34.

The Examiner alleges that the operating rod 88 as described in the *Erickson* patent is analogous to Applicant's claimed rotating shaft. Applicant disagrees since the operating rod 88 is not described as rotating or pivoting about an axis within the circuit breaker. Rather, the operating rod 88 describes as transferring the movement of actuator 74 to the carrier 18. Because the operating rod 88 is substantially straight rod having two bent ends, it appears that the rod transfers the rotating force of the actuator 24 to the carrier 18 through a translational force. There appears to be no teaching or suggestion in the *Erickson* patent or of record that would lead one of ordinary skill to rationalize or reason that the operating rod rotates about an axis to apply a force to the carrier 18.

In summary, neither the *Byers* nor *Erickson* patents when applied alone or in combination as alleged by the Examiner disclose or suggest at least all of the features recited in Applicant's claims 4 and 12. Applicant adds that one of ordinary skill would understand that the *Erickson* patent also fails to remedy the deficiencies of the *Byers* patent as it relates to the features of claim 1 discussed above. Neither does the *Mody* patent disclose or suggest features that when combined with either the *Byers* and/or *Erickson* patents render Applicant's claims obvious.

The Office has the initial burden of establishing a **factual basis** to support the legal conclusion of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d

1443, 1444 (Fed. Cir. 1992). For rejections under 35 U.S.C. § 103(a) based upon a combination of prior art elements, in KSR Int'l v. Teleflex Inc., 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007), the Supreme Court stated that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some **articulated reasoning with some rational underpinning** to support the legal conclusion of obviousness." In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (emphasis added). As a result of the above-described deficiencies in the applied art, Applicant respectfully requests that all rejections under 35 U.S.C. §103 be withdrawn.

Conclusion

Based on at least the foregoing amendments and remarks, Applicant submits that claims 1-22 are allowable, and this application is in condition for allowance. Accordingly, Applicant requests a favorable examination and consideration of the instant application. In the event the instant application can be placed in even better form, Applicant requests that the undersigned attorney be contacted at the number listed below.

Respectfully submitted,

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